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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,516	02/02/2000	Peter F. Zalud	SAR 12165	6354
26581	7590	06/30/2004	EXAMINER	
RATNERPRESTIA			AHN, SAM K	
P.O. BOX 980			ART UNIT	
VALLEY FORGE, PA 19482-0980			PAPER NUMBER	

2634

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,516

Applicant(s)

ZALUD ET AL.

Examiner

Sam K. Ahn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 19 and 22 is/are allowed.
- 6) ☒ Claim(s) 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 16-18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/10/04 has been entered.

Claim Objections

2. Claims 16-18, 20, 21, 23 and 24 are objected to because of the following informalities:

In claims 16-18, line 1, respectively, delete "claim 15" and insert "claim 15,".

In claim 17, line 2, delete "a maximum value" and insert "the maximum count value".

In claim 18, line 2, delete "a minimum value" and insert "the minimum count value".

In claims 20 and 21, line 1, respectively, delete "claim 19" and insert "claim 19,".

In claim 23, line 2, delete "third signal" and insert "a third signal".

In claims 23 and 24, line 1, respectively, delete "claim 22" and insert "claim 22,".

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Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites a "data means" producing a third signal including a fifth and sixth data value. It is unclear from the claim whether the recited element is the same "data means" already recited in claim 22, lines 8-10.

The data means of claim 23 calls for producing the third signal including the fifth data value and sixth data value when the count value is compared with the first threshold value, which is also used in the integrator, and when the count value is reset, which is used in the discriminator.

Therefore, it is also unclear where this data means is located in Fig.9.

Furthermore, in lines 2 and 3 of claim 23, recites "the count value". It is unclear whether it is referring to the first count value, used in the integrator, or is referring to the second count value, used in the discriminator, or is a new count value.

Claim 24 directly depends on claim 23.

Allowable Subject Matter

4. Claims 15, 19 and 22 are allowed.
5. Claims 16-18 and 20-21 would be allowable if rewritten or amended to overcome the claim objections, set forth in this Office action.
6. Claims 23 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and claim objections, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter:

Present application discloses a decoder comprising an integrator and a discriminator. The claims recite an integrator as illustrated in Fig.10 where a minimum and a maximum thresholds are above and below a maximum and minimum count values. Giles, teaches in the same field of endeavor, producing signals wherein the signal generation means comprises thresholds and a counter, however, Giles inhibits the counter from counting above or below the predetermined thresholds.

The claims also recite a discriminator comprising receiving means, counter means and clock synchronization means, as recited in claim 19. Prior arts, Sekigawa in view of Nimishakavi, do not teach or suggest in combination of all the limitation recited. Prior art does not teach the limitation where the counter increases when first data value in a first signal is received and reset count value upon receiving a second data value. And further, a clock

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synchronization signal is produced when the count value in the counter is greater than or equal to a first threshold value.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Ahn** whose telephone number is **(703) 305-0754**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

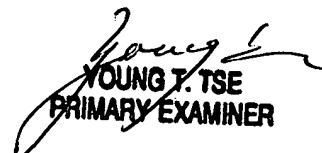
or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Sam K. Ahn
6/24/04


YOUNG T. TSE
PRIMARY EXAMINER